REMARKS/ARGUMENTS

In the Claims:

Claims 1-5, 11, and 27-34 are in this application.

Claims 6-10 and 12-26 have been canceled.

Claims 1-3, 5, 11, and 28-29 are currently amended.

Claim 32-34 are new.

Claim Rejections

§ 112 Rejections

Claims 11 and 31 were rejected under 35 U.S.C. 112, second paragraph, as

being indefinite for failing to particularly point out and distinctly claim the subject matter

which applicant regards as the invention. Claim 11 was rejected for reciting "the first

material." Claim 31 was rejected as depending from a rejected base claim. (Office

Action at Page 2).

Accordingly, "the first material" has been deleted from claim 11.

§ 102 Rejections

Claims 1-3, 11, and 27-30 were rejected under 35 U.S.C. 102(b) as being

anticipated by Pan (US 4,983,250). (Office Action at Page 3).

Claim 1 is currently amended. Independent claim 1 now recites "the laser beam

penetrates beyond the first material and into the second material." Pan discloses a

laser beam to induce local interdiffusion between two layers. (Pan at col. 3, lines 31-

36). However, Pan does not disclose a laser beam penetrating beyond a first material

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and into a second material. (Pan at col. 3, lines 40-47). Therefore, claim 1 is not

anticipated by Pan.

Claims 2-3 and 27-30 depend from claim 1. Based at least in part on their

dependencies, claims 2-3 and 27-30 are also not anticipated by Pan.

Claim 11 is currently amended. Independent claim 11 now recites "the laser

beam penetrates beyond the diffusion layer and into the metal layer." Pan discloses a

laser beam to induce local interdiffusion between two layers. (Pan at col. 3, lines 31-

36). However, Pan does not disclose a laser beam penetrating beyond a diffusion layer

and into a metal layer. (Pan at col. 3, lines 40-47). Therefore, claim 11 is not

anticipated by Pan.

§ 103 Rejections

Claim 4 was rejected under 35 U.S.C. 103(a) as being unpatentable over Pan in

view of Mori et al. (US 5,821,627) (hereinafter "Mori"). (Office Action at Page 4).

Claim 4 depends from independent claim 1. As discussed, Pan does not disclose

the limitations of claim 1. Mori discusses solid-phase diffusion bonding (Mori, Abstract).

Mori fails to cure the deficiency of Pan with respect to claim 1. Based at least in part on

its dependency, claim 4 is not rendered obvious by Pan and Mori.

Claim 5 was rejected under 35 U.S.C. 103(a) as being unpatentable over Pan.

(Office Action at Page 5).

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Claim 5 depends from independent claim 1. As discussed, Pan does not disclose

the limitations of claim 1. Based at least in part on its dependency, claim 5 is not

rendered obvious by Pan.

Claim 31 was rejected under 35 U.S.C. 103(a) as being unpatentable over Pan in

view of Lee et al. (US 6,521,523) (hereinafter "Lee"). (Office Action at page 5).

Claim 31 depends from independent claim 11. As discussed, Pan does not

disclose the limitations of claim 11. Lee discusses annealing to selectively form

aluminum-copper alloys. (Lee, Abstract). However, Lee does not discuss a laser beam

penetrating beyond a diffusion layer and into a metal layer. (Lee at col. 5, lines 14-19).

Therefore, Lee fails to cure the deficiency of Pan with respect to claim 11. Based at

least in part on its dependency, claim 31 is not rendered obvious by Pan and Lee.

Conclusion:

Applicant respectfully submits that claims 1-5, 11, and 27-34 are in condition for

allowance. Early issuance of the Notice of Allowance is respectfully requested.

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The Commissioner is hereby authorized to charge shortages or credit overpayments to Deposit Account No. 022666. A Fee Transmittal is enclosed in duplicate for fee processing purposes. The Examiner is invited to call Paul A. Mendonsa at (503) 439-8778 if there remains any issue with allowance of this case.

Respectfully submitted,

INTEL CORPORATION

Dated: FEB 17, 2005 2004

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